

OIRP 0590
0831

CRF Errors Corrected by the STIC Systems Branch

CRF Processing Date: 10/10/2001
 Edited by: [Signature]
 Verified by: [Signature] (STIC staff)

Serial Number: 09/924,340

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patent bug). Sequences corrected: _____
- ☐ Other: _____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/924,340

DATE: 10/10/2001
TIME: 18:15:39

Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

C--> 2 <110> APPLICANT: Bejanin, Stephane
3 Tanaka, Hiroaki
5 <120> TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
7 <130> FILE REFERENCE: 91.US2.REG
9 <140> CURRENT APPLICATION NUMBER: US/09/924,340
10 <141> CURRENT FILING DATE: 2001-08-06
12 <150> PRIOR APPLICATION NUMBER: US 60/305,456
13 <151> PRIOR FILING DATE: 2001-07-13
15 <150> PRIOR APPLICATION NUMBER: US 60/302,277
16 <151> PRIOR FILING DATE: 2001-06-29
18 <150> PRIOR APPLICATION NUMBER: US 60/298,698
19 <151> PRIOR FILING DATE: 2001-06-15
21 <150> PRIOR APPLICATION NUMBER: US 60/293,574
22 <151> PRIOR FILING DATE: 2001-05-25
24 <160> NUMBER OF SEQ ID NOS: 112
26 <170> SOFTWARE: JPatent
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 2016
30 <212> TYPE: DNA
31 <213> ORGANISM: Homo sapiens
33 <220> FEATURE:
34 <221> NAME/KEY: 5'UTR
35 <222> LOCATION: 1..1434
37 <220> FEATURE:
38 <221> NAME/KEY: CDS
39 <222> LOCATION: 1435..1836
41 <220> FEATURE:
42 <221> NAME/KEY: 3'UTR
43 <222> LOCATION: 1837..2016
45 <220> FEATURE:
46 <221> NAME/KEY: polyA_signal
47 <222> LOCATION: 1965..1970
49 <220> FEATURE:
50 <221> NAME/KEY: polyA_site
51 <222> LOCATION: 2001..2016
53 <400> SEQUENCE: 1
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55 gccatcacca agaaccgaa catgcggaca ccctgatctc ggacttctag ccttcagaac 120
56 cgttgccaca gttttgatga tcatctctct cccaaccaag atggtggaaa aagcaaaaac 180
57 gtggtgaatc ttggagcaat ccgacaagga atgaaacgct tccaatttct gttaaactgc 240
58 tgtgagccag ggacaattcc tgatgcctcc atcctagcag ctgccttgga tctactatgc 300
59 ggcattcttc tgattcattt ttctccattt gtgctgtttt tctctgtgat gtgaatccat 360
60 ccctatccat tatgtcatgc ctccatcttt tgcgtcttct tcagattgca ctgagccata 420
61 agaggaagcc cctgtggtgg ccagagcagc cttgttcctg gaatgtgctc gttttgttca 480
62 ccgctgcaac cgtggcaact ggccagagtg gatgaaaggg caccacgtga acatcaccaa 540
63 gaaaggactt tcccggggac gctctcccat tgtgggcaac aagcgaaacc agaagctgca 600
64 gtggaatgca gccaaagtct tctaccaatg gggagacaag gaaaaaaggt gaagaataaa 660

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Input Set : N:\jumbos\924340.txt

Output Set: N:\CRF3\10102001\I924340.raw

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65 aggaaattca agaggaccaa gtttctgcta atttttagaca gagctgaaca taaacacaca 720
66 taaagagggt ccatatattc ctcttttctt aaagattact tggaataact gttacaattt 780
67 ccgttaataa ttcagctgaa tgtgtctacc aatgtgctta ccaactaagg caattggcgt 840
68 ccgattgaat gagctgtgcc acggggaaag tgagagccca gccaacctgc tgggtctcat 900
69 ttacgatgaa gagaccaaga ggagacttag aaaggaggat gaggaggaag actttttaga 960
70 tgacattcca ctttcaagtc aatacacagc tcatcttgca tttaaaagct gattatgggtg 1020
71 caagcaactt tcgggctgga aattctacag aagcttgtct tttccattct tgatgagagg 1080
72 caaagtcccc ggcaacaaat taactcagga gagaaaatgg ttttctgaa aaaaacgata 1140
73 gcttaaatat ctacagaaaag accgtaattt ccacctattt tcaaataaaa tcgtgaaaaa 1200
74 cacatttgga cttagagctga aacaacttca ctgccctcaa aacagcaaga cagacatccc 1260
75 tcataaaatg aactgacaga atttttatag ctccaaatct agttcactgc catatacata 1320
76 gtctaaatct gattgaatag cagcgtagaa atcttgcgaa attacttccc atttctgttt 1380
77 tcgttaaaaag gtactgtgaa cccctctaaa tgcggttgcc cctttgcctt gaag atg 1437
78 Met
79 1
80 gca gca tgt cag ctt ctt ctg gag att acc acc ttc ctg cga gag acc 1485
81 Ala Ala Cys Gln Leu Leu Leu Glu Ile Thr Thr Phe Leu Arg Glu Thr
82 5 10 15
83 ttt tct tgc ctg ccc aga cct cgc act gag cct ctg gtg gct tca acg 1533
84 Phe Ser Cys Leu Pro Arg Pro Arg Thr Glu Pro Leu Val Ala Ser Thr
85 20 25 30
86 gac cac acc aaa atg cca tct caa atg gaa cac gcc atg gaa acc atg 1581
87 Asp His Thr Lys Met Pro Ser Gln Met Glu His Ala Met Glu Thr Met
88 35 40 45
89 atg ttt aca ttt cac aaa ttc gct ggg gat aaa ggc tac tta aca aag 1629
90 Met Phe Thr Phe His Lys Phe Ala Gly Asp Lys Gly Tyr Leu Thr Lys
91 50 55 60 65
92 gag gac ctg aga gta ctc atg gaa aag gag ttc cct gga ttt ttg gaa 1677
93 Glu Asp Leu Arg Val Leu Met Glu Lys Glu Phe Pro Gly Phe Leu Glu
94 70 75 80
95 aat caa aaa gac cct ctg gct gtg gac aaa ata atg aag gac ctg gac 1725
96 Asn Gln Lys Asp Pro Leu Ala Val Asp Lys Ile Met Lys Asp Leu Asp
97 85 90 95
98 cag tgt aga gat ggc aaa gtg ggc ttc cag agc ttc ttt tcc cta att 1773
99 Gln Cys Arg Asp Gly Lys Val Gly Phe Gln Ser Phe Phe Ser Leu Ile
100 100 105 110
101 gcg ggc ctc acc att gca tgc aat gac tat ttt gta gta cac atg aag 1821
102 Ala Gly Leu Thr Ile Ala Cys Asn Asp Tyr Phe Val Val His Met Lys
103 115 120 125
104 cag aag gga aag aag taggcagaaa tgagcagttc gtcctccct gataagagtt 1876
105 Gln Lys Gly Lys Lys
106 130
107 gtcccaaagg gtcgcttaag gaatctgccc cacagcttcc cccatagaag gatttcatga 1936
108 gcagatcagg acacttagca aatgtaaaaa taaaatctaa ctctcatttg acaagcagag 1996
109 aaagaaaaaa aaaaaaaaaa 2016
111 <210> SEQ ID NO: 2
112 <211> LENGTH: 134
113 <212> TYPE: PRT
114 <213> ORGANISM: Homo sapiens

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Input Set : N:\jumbos\924340.txt
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116 <400> SEQUENCE: 2
117 Met Ala Ala Cys Gln Leu Leu Leu Glu Ile Thr Thr Phe Leu Arg Glu
118 1 5 10 15
119 Thr Phe Ser Cys Leu Pro Arg Pro Arg Thr Glu Pro Leu Val Ala Ser
120 20 25 30
121 Thr Asp His Thr Lys Met Pro Ser Gln Met Glu His Ala Met Glu Thr
122 35 40 45
123 Met Met Phe Thr Phe His Lys Phe Ala Gly Asp Lys Gly Tyr Leu Thr
124 50 55 60
125 Lys Glu Asp Leu Arg Val Leu Met Glu Lys Glu Phe Pro Gly Phe Leu
126 65 70 75 80
127 Glu Asn Gln Lys Asp Pro Leu Ala Val Asp Lys Ile Met Lys Asp Leu
128 85 90 95
129 Asp Gln Cys Arg Asp Gly Lys Val Gly Phe Gln Ser Phe Phe Ser Leu
130 100 105 110
131 Ile Ala Gly Leu Thr Ile Ala Cys Asn Asp Tyr Phe Val Val His Met
132 115 120 125
133 Lys Gln Lys Gly Lys Lys
134 130
136 <210> SEQ ID NO: 3
137 <211> LENGTH: 1081
138 <212> TYPE: DNA
139 <213> ORGANISM: Homo sapiens
141 <220> FEATURE:
142 <221> NAME/KEY: 5'UTR
143 <222> LOCATION: 1..38
145 <220> FEATURE:
146 <221> NAME/KEY: CDS
147 <222> LOCATION: 39..917
149 <220> FEATURE:
150 <221> NAME/KEY: 3'UTR
151 <222> LOCATION: 918..1081
153 <220> FEATURE:
154 <221> NAME/KEY: polyA_signal
155 <222> LOCATION: 1045..1050
157 <220> FEATURE:
158 <221> NAME/KEY: polyA_site
159 <222> LOCATION: 1066..1081
161 <400> SEQUENCE: 3
162 gtccagcctg ttgctgatgc tgccgtgcgg tacttgtc atg gag ctg gca ctg cgg 56
163 Met Glu Leu Ala Leu Arg
164 -25 -20
165 cgc tct ccc gtc ccg cgg tgg ttg ctg ctg ctg ccg ctg ctg ggc 104
166 Arg Ser Pro Val Pro Arg Trp Leu Leu Leu Leu Pro Leu Leu Gly
167 -15 -10 -5
168 ctg aac gca gga gct gtc att gac tgg ccc aca gag gag ggc aag gaa 152
169 Leu Asn Ala Gly Ala Val Ile Asp Trp Pro Thr Glu Glu Gly Lys Glu
170 1 5 10
171 gta tgg gat tat gtg acg gtc cgc aag gat gcc tac atg ttc tgg tgg 200

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Input Set : N:\jumbos\924340.txt

Output Set: N:\CRF3\10102001\I924340.raw

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172 Val Trp Asp Tyr Val Thr Val Arg Lys Asp Ala Tyr Met Phe Trp Trp
173      15                20                25
174 ctc tat tat gcc acc aac tcc tgc aag aac ttc tca gaa ctg ccc ctg      248
175 Leu Tyr Tyr Ala Thr Asn Ser Cys Lys Asn Phe Ser Glu Leu Pro Leu
176 30                35                40                45
177 gtc atg tgg ctt cag ggc ggt cca ggc ggt tct agc act gga ttt gga      296
178 Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser Ser Thr Gly Phe Gly
179                50                55                60
180 aac ttt gag gaa att ggg ccc ctt gac agt gat ctc aaa cca cgg aaa      344
181 Asn Phe Glu Glu Ile Gly Pro Leu Asn Ser Asp Leu Lys Pro Arg Lys
182                65                70                75
183 acc acc tgg ctc cag gct gcc agt ctc cta ttt gtg gat aat ccc gtg      392
184 Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe Val Asp Asn Pro Val
185                80                85                90
186 ggc act ggg ttc agt tat gtg aat ggt agt ggt gcc tat gcc aag gac      440
187 Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly Ala Tyr Ala Lys Asp
188                95                100                105
189 ctg gct atg gtg gct tca gac atg atg gtt ctc ctg aag acc ttc ttc      488
190 Leu Ala Met Val Ala Ser Asp Met Met Val Leu Leu Lys Thr Phe Phe
191 110                115                120                125
192 agt tgc cac aaa gaa ttc cag aca gtt cca ttc tac att ttc tca gag      536
193 Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser Glu
194                130                135                140
195 tcc tat gga gga aaa atg gca gct ggc att ggt cta gag ctt tat aag      584
196 Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly Leu Glu Leu Tyr Lys
197                145                150                155
198 gcc att cag cga ggg acc atc aag tgc aac ttt gcg ggg gtt gcc ttg      632
199 Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe Ala Gly Val Ala Leu
200                160                165                170
201 ggt gat tcc tgg atc tcc cct gtt gat tgc gtg ctc tcc tgg gga cct      680
202 Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val Leu Ser Trp Gly Pro
203                175                180                185
204 tac ctg tac agc atg tct ctt ctc gaa gac aaa ggt ctg gca gag gtg      728
205 Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys Gly Leu Ala Glu Val
206 190                195                200                205
207 tct aag gtt gca gag caa gta ctg aat gcc gta aat aag ggg ctc tac      776
208 Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val Asn Lys Gly Leu Tyr
209                210                215                220
210 aga gag gcc aca gag ctg tgg ggg aaa gca gaa atg atc att gaa cag      824
211 Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu Met Ile Ile Glu Gln
212                225                230                235
213 gta aaa agg gga aac act cag agg cta gcc tgc ttg gct ttt tct ggt      872
214 Val Lys Arg Gly Asn Thr Gln Arg Leu Ala Cys Leu Ala Phe Ser Gly
215                240                245                250
216 ggg tac agg gcc cat ggt tgg tgt tgt caa act tgg agt cta cac      917
217 Gly Tyr Arg Ala His Gly Trp Cys Cys Gln Thr Trp Ser Leu His
218                255                260                265
219 tgaggctccc cacatatctg caaatgattg catgctggat aataaatctc ttgggtctaa 977
220 gcagtgatgt agtggctcct tacagagtca gaaagccacc caggcctgca agacttgctt 1037

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RAW SEQUENCE LISTING
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DATE: 10/10/2001
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Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

1081

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221 gtccttcact aaatgtatgg attctattaa aaaaaaaaaa aaaa
223 <210> SEQ ID NO: 4
224 <211> LENGTH: 293
225 <212> TYPE: PRT
226 <213> ORGANISM: Homo sapiens
228 <220> FEATURE:
229 <221> NAME/KEY: SIGNAL
230 <222> LOCATION: 1..26
232 <400> SEQUENCE: 4
233 Met Glu Leu Ala Leu Arg Arg Ser Pro Val Pro Arg Trp Leu Leu Leu
234 -25 -20 -15
235 Leu Pro Leu Leu Leu Gly Leu Asn Ala Gly Ala Val Ile Asp Trp Pro
236 -10 -5 1 5
237 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp
238 10 15 20
239 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Asn Ser Cys Lys Asn
240 25 30 35
241 Phe Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly
242 40 45 50
243 Ser Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser
244 55 60 65 70
245 Asp Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu
246 75 80 85
247 Phe Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser
248 90 95 100
249 Gly Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val
250 105 110 115
251 Leu Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro
252 120 125 130
253 Phe Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile
254 135 140 145 150
255 Gly Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn
256 155 160 165
257 Phe Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser
258 170 175 180
259 Val Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp
260 185 190 195
261 Lys Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala
262 200 205 210
263 Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala
264 215 220 225 230
265 Glu Met Ile Ile Glu Gln Val Lys Arg Gly Asn Thr Gln Arg Leu Ala
266 235 240 245
267 Cys Leu Ala Phe Ser Gly Gly Tyr Arg Ala His Gly Trp Cys Cys Gln
268 250 255 260
269 Thr Trp Ser Leu His
270 265
272 <210> SEQ ID NO: 5
273 <211> LENGTH: 438

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Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/924,340

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Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:1470 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:27
L:1470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1491 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:27
L:1491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1592 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:29
L:1592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:4089 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:71
L:4089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71
L:4156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72

10/10/01